REMARKS

Claims 1, 2, 6, and 17 were in this case and stand rejected. These claims have been amended and new Claims 38-45 have been added. Therefore, upon acceptance and entry into the record, Claims 1, 2, 6, 17, and 38-45 will be in this case.

In view of the 35 USC §112 rejections made in Paper No. 8, the claims have been amended as follows:

Claim 1 has been amended to recite a mpl ligand comprising the human EPO-domain fragment (hML_{153}) having the amino acid sequence shown in Figure 1 (SEQ ID NO:1) and variants comprising ligands having at least 90% sequence identity with the human EPO-domain moiety. Specific support for this amendment can be found in original Claim 6, Figure 1 (SEQ ID NO:1), page 34, lines 1-4 and page 22, lines 9-18 of the specification.

Claim 2 has been amended to recite a fragment mpl ligand that is the human EPO-domain fragment (hML_{153}) and extensions thereof. Support for the new language is found in original Claim 6. Variants of Claim 2 have been amended to recite 95% sequence identity with the human mpl ligand EPO-domain fragment. Specific support for that language is found in the specification on page 22, lines 12-18. Finally, chimeras are defined as a fusion of the foregoing mpl ligands and a heterologous polypeptide selected from IgG fragments, IL-3, G-CSF and EPO. Specific support for that amended language is found in the specification on page 34, lines 14-17.

Claim 6 was amended to further specify the fragment of Claim 2 and delete the full length human species as a fragment.

Claim 17 was amended to define the chimera as one comprising a hML fragment fused to human EPO. Support for that language can be found in the specification on page 34, lines 14-17 and in Figure 10 (SEQ ID NO:7).

New Claims 38 and 39 depend from Claim 1 and recite the specific human mpl ligands hML_{332} and hML_{153} described in the specification on page 32, lines 24-26. New Claim 40 recites the glycosylated form of hML_{332} described on page 71, lines 28-32. New Claim 42 recites the unglycosylated form of hML described on page 32, lines 23-24.

New Claim 41 recites adding one or more amino acid residues to the amino terminus (comprising) provided that the N-terminus is a methionyl residue. Support for this claim is found in the specification on page 52, lines 7-8.

New Claim 43 recites linking a nonproteinaceous polymer to the mpl ligand described in the specification on page 72, lines 32-35.

New Claims 44 and 45 recite substitutional variants including hML_{332} (R153A, R154A). Substitutional variants are described on page 52, lines 20-22 and page 32, lines 26-27.

Accordingly, Applicants believe no new matter has been added. Applicants respectfully request reconsideration in view of the foregoing amendments and explanations below pursuant to 37 CFR §1.111.

Double Patenting Rejection

When a case issues from this large family of applications, Attorney for Applicants intends to cancel coextensive claims or file a terminal disclaimer as necessary.

Objections and Rejections under 35 USC §112

The Examiner has rejected Claims 1, 2, 6, and 17 for the proposition that Enablement is not commensurate in scope with claims to all possible substantially homogeneous mpl ligands. The Examiner further objects to claims to mpl ligands defined by a single biological function and states that the claims do not positively identify the protein which is the basis for the currently claimed invention.

Applicants have amended Claims 1, 2, 6, and 17 to specifically recite proteins comprising the human EPO-domain, which Applicants identified as the portion of the mpl ligand responsible for thrombopoietic activity, defined by the amino acid sequence specified in Figure 1. Applicants have additionally claimed variants comprising ligands that are at least 90% or 95% identical to the EPO-domain of human mpl ligand hML_{153}. Applicants believe these amendments positively identify the protein of the invention and are commensurate in scope with the teaching of the specification.

Newly added Claims 38-45 also specifically recite proteins comprising the human mpl ligand, EPO domain including glycosylated, unglycosylated variant, pegylated and fusion forms of the proteins comprising the EPO domain of the human mpl ligand. Applicants believe these newly added claims also positively identify the protein of this invention and are commensurate in scope with the teaching of the specification.

Applicants respectfully request reconsideration in view of the foregoing amendments and explanation.

Respectfully submitted,

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